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DOCUMENT RESUME

ED 282 119 CG 019 883

AUTHOR Di Pilato, Marina; And Others
TITLE Person Perception of Type As and Type Bs: A Round Robin Design.
PUB DATE Aug 86
NOTE 19p.; Paper presented at the Annual Convention of the American Psychological Association (94th, Washington, DC, August 22-26, 1986).
PUB TYPE Reports - Research/Technical (143) -- Speeches/Conference Papers (150)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS College Students; Higher Education; *Interpersonal Attraction; Interpersonal Relationship; Males; *Personality Traits; *Social Cognition; Student Attitudes
IDENTIFIERS *Type A Behavior; *Type B Behavior

ABSTRACT

Previous research suggesting that there may be some interpersonal characteristics of Type A individuals, such as dominance and forcefulness, that may be less facilitative of meaningful relationships has used subjects who were previously unacquainted with each other. This study investigated the perceptions others have of the interpersonal style and behaviors of Type As and Type Bs in a more natural setting. Fifteen groups of six college males (three Type As, three Type Bs) who were acquainted with each other were asked to rate themselves and the other members of the group on six Type A-related adjectives and other exploratory personality dimensions. The round robin design used in this study permitted a more complete analysis of the factors which affect person perception. It was found that Type As rated both Type As and Type Bs higher on the six Type A-related adjectives, but not on the other adjectives. A reasonable degree of rater accuracy was found despite the presence of a consistent subject response style. Subjects did not, however, rate each other in a highly similar manner. These findings suggest that Type As may view all others as more dominant and forceful than do Type Bs which may negatively affect Type A interpersonal relationships. (Author/NB)

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Person Perception of Type As and Type Bs: A Round Robin Design

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Running Head: PERSON PERCEPTION OF TYPE As AND TYPE Bs

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Abstract

The present study examined the perceptions others have of the interpersonal style and behaviors of Type As and Type Bs. Fifteen groups of six college males (three of each type) who were acquainted with each other were asked to rate themselves and the other members of the group on six Type A-related adjectives and other exploratory personality dimensions. The round robin design used in this study permitted a more complete analysis of the factors which affect person perception. It was found that Type As rated both Type As and Type Bs higher on the six Type A-related, but not on other adjectives. A reasonable degree of rater accuracy was found despite the presence of a consistent subject response style. Subjects did not, however, rate each other in a highly similar manner. The results are discussed in terms of how Type As' view of others may affect their relationships with others.

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Person Perception of Type As and Type Bs: A Round Robin Analysis

The Type A coronary prone behavior pattern refers to a cluster of behaviors that has been linked to an increased risk of developing coronary heart disease (Roseman, Brand, Jenkins, Friedman, Straus, and Wurm, 1975). Within the psychological literature Type As have been described as aggressive, competitive, impatient, hard-driving and job-involved relative to Type Bs (Glass, 1977). Interpersonally, Type As and Bs do not differ in their reported feelings of social insecurity or number of social relationships. Type As, however, report that they have fewer confidants, fewer supportive relationships and have more negative family and marital interactions relative to Type Bs (Jenkins, Zyzanski, Ryan, Flessas, Tannenbaum, 1977; Suls, Becker, & Mullen, 1981). There is also evidence that Type As view themselves as more dominant than Type Bs view themselves (Matthews & Krantz, 1976).

Several laboratory studies have provided information about the interactional style of Type As. Using a computerized mixed-motive game, Van Egeren (1979) and Van Egeren, Sniderman, and Roggelin (1982) showed that the interactions of pairs of Type As were more competitive and aggressive than were other types of dyads (i.e., BB and AB dyads). Pairs of Type Bs were more cooperative than dyads which contained Type As (i.e., AA and AB dyads). When Type As were paired with Type Bs, the Type As tended to interact in a less aggressive and competitive manner and more closely resembled the Type Bs. In other studies of interpersonal interactions, Type As

have been found to be more dominant in group discussion tasks than type Bs (Yarnold, Musser, & Grimm, 1985; Yarnold & Grimm, 1982).

These results suggest that there may be some interpersonal characteristics of Type As, such as dominance and forcefulness, that may be less facilitative of meaningful relationships. Unfortunately, all research to date has used subjects who were not previously acquainted with each other. Therefore, it is unknown to what extent these characteristics are perceived by acquaintances and significant others.

The purpose of this study was to investigate the perceptions others have of the interpersonal style and behaviors of Type As and Type Bs in a more natural setting. This kind of research has been difficult due to the complex number of factors which affect person perception (Schneider, Hastorf, & Ellsworth, 1979). The Social Relations Model (Kenny & La Voie 1984; Kenny & Albright, 1986) overcomes many of these difficulties because it provides for designs and analyses that allow for the unconfounding of actor, partner, relationship and instability effects in studies of dyadic relationships (Kenny & La Voie, 1984). Actor effects refer to the average level of behavior a person performs in the presence of others. Partner effects refer to the amount of behavior a person consistently elicits from others. Relationship effects refer to the unique interactions and adjustments within a specific pair of individuals. Instability takes into account random variation (Kenny & La Voie, 1984).

Kenny (in press) has recently extended the model by identifying several inter-relationships between the ways people view each other and themselves. The first, termed reciprocity, concerns whether two subjects rating each other see each other in a similar fashion. That is, do John and Mary perceive each other in the same way? The second relationship, self-other agreement, assesses the degree to which others see a person as the person sees himself or herself. For example, does Mary view John in the same manner as John views himself? Examination of self-other agreement can be considered a validity check or a measure of rater accuracy (Funder, in press). Third, assumed similarity asks whether a person sees others as the person sees him or herself. That is, does Mary view John in the same manner as Mary views herself? Assumed similarity is reflective of a consistent rater response set on the part of the perceiver. These perspectives were examined in the present study on an exploratory basis.

It was predicted that when rating others on traits descriptive of the interactional style of Type As, Type As would rate other Type As most highly. Ratings within the other dyads on these traits were predicted to be lower. To investigate discriminant validity, other traits that are independent of the Type A dimension were also included.

Method

Subjects

Ninety male Arizona State University students volunteered to

participate in this study. The men were acquainted with each other based on their involvement in the same campus organizations (i.e., fraternities, athletic teams, ROTC).

Design and Procedure

The student version of the Jenkins Activity Survey (Glass, 1977), which is a measure of Type A, was used to screen 278 men belonging to eleven campus organizations. A median split was used to identify Type As and Type Bs with those scoring eight or higher designated as Type As and those scoring seven or lower designated as Type Bs (Glass, 1977). Clusters of three As and three Bs who were acquainted with each other were then selected to participate in a blocked, round robin design (see Figure 1). The subjects were recontacted and asked to rate themselves and the other five members of their cluster. They were rated on six Type A-related adjective rating scales and on eight bipolar rating scales based on Wiggins (1979) circumplex model of trait terms. Subjects also rated how well they knew the other members of the cluster. Fifteen such clusters were formed.

Insert Figure 1 about here

Results

Three composite measures were constructed: Overall Type A, the Wiggins A dimension and the Wiggins B dimension. The Overall Type A measure was calculated by taking the mean of each subject's Z-scores

of each of the six individual adjective rating scales used as descriptors of Type A: dominant, forceful, industrious, hard-driving, competitive, and persistent. The composite Wiggins A dimension and Wiggins B dimension measures were constructed using a predetermined weighting system based on Wiggins (1979; see also Buss & Craik, 1981) circumplex model. The Wiggins A dimension was anchored by Ambitious-Dominant and Lazy-Submissive and therefore has the higher overlap with the individual descriptors of Type A. The Wiggins B dimension is theoretically independent of the Wiggins A dimension and is anchored by Warm-Agreeable and Cold-Quarrelsome.

The data were analyzed in two ways. The first way was based on the round robin approach and executed with the SOREMO program (Kenny, 1985). Peer ratings were examined first. Initial tests indicated that a significant percentage of the variance was accounted for by actor and partner effects for each of the three composite measures (see Table 1). The relationship between individual student Jenkins scores and estimates of actor and partner effects on the three composite measures were then examined (cf. Malloy & Kenny, 1986). There was a significant positive correlation between scores on the student Jenkins and the actor effect on the overall Type A measure ($r=.29$; $p<.01$). None of the correlations between the student Jenkins and the actor or partner effects on the composite Wiggins A dimension or the Wiggins B dimension attained statistical significance (see Table 2).

Insert Tables 1 and 2 about here

The second approach is based upon Kenny's (personal communication, 1984) method of assessing rater, ratee, and rater by ratee interaction effects in blocked round robin designs. His method involves computing a mean for each variable within each cluster for each distinct type of dyad. Specific contrasts are then computed for each variable to provide estimates of the effect of rater type while holding the type of ratee constant, ratee type while holding rater type constant, and the interaction between rater and ratee types. A t-test for each of these effects was then conducted over the fifteen clusters. Results indicated a significant rater effect on the Overall Type A measure, $t = 2.25$, $p < .05$. Type As rated Type As and Type Bs higher on the Overall Type A descriptors than did Type Bs. No significant differences were found for other effects within the other composite measures. These results corroborate the results of the first analysis.

To establish discriminant validity, the magnitude of the Type A versus Type B rater effect was examined by testing the extent to which it occurred on the Overall Type A measure over and beyond the nonsignificant extent to which it occurred on the Wiggins A and B composite measures. This difference was found to be significant, $t = 2.89$, $p < .05$.

A major potential source of bias in the ratings is that Type A

and B subjects could be differentially acquainted with other members of the rating cluster. Analyses using the SOREMO program showed that there was no relationship between Jenkins scores and rater (t = .57, ns), ratee (t = 1.15, ns) or interaction (t = .68, ns) effects for the measures of how well subjects knew other members of the cluster.

Finally, the three types of inter-relationships identified by Kenny (in press) were examined. Reciprocity was not evidenced on the Overall Type A measure (r = .10, ns), the Wiggins A dimension (r = .27, ns) or the Wiggins B dimension (r = .24, ns). Self-other agreement was evidenced for the Overall Type A measure (r = .40, p < .01), the Wiggins A dimension (r = .45, p < .01) and the Wiggins B dimension (r = .60, p < .01). Assumed similarity was demonstrated for the Type A measure (r = .68, p < .01), the Wiggins A dimension (r = .59, p < .01) and the Wiggins B dimension (r = .69, p < .01). Results are presented in Table 3.

Insert Table 3 about here

Discussion

The results did not support the hypothesis that Type As would rate other Type As most highly on Type A descriptors with ratings within other dyads being lower. Type As in comparison to Type Bs tended to rate all others higher on the Type A descriptors. This finding could be interpreted to mean that Type As view others in

general quite differently than Type Bs. Type As may view all others as more dominant and forceful than Type Bs which may negatively affect interpersonal relationships (cf. Kelley & Stahelski, 1970).

The significant correlations found for self-other agreement indicates a reasonable degree of rater accuracy. This occurred despite the presence of a consistent subject response style, indicated by the significant correlations found for assumed similarity. Reciprocity in ratings were not strong enough to attain significance. Subjects did not necessarily rate each other in a highly similar manner although the trend was in that direction.

There are several methodological differences between the present and previous studies which may have led to the present seemingly divergent results. First, the subjects in the present study were not strangers. They were familiar with each other and had been interacting over a period of time ranging from several months to several years. A second, and related difference, is that the subjects in this study were not interacting in a single prescribed, structured situation; rather they had had the opportunity to interact with each other in a variety of interpersonal contexts. Third, the subjects in the present study were selected from groups in which they had chosen to be involved. It has been suggested that laboratory studies place individuals in situations in which they would not normally choose to be (Diener, Larsen, & Emmons, 1984). Therefore, what has been seen in previous studies may be, in part, a response to the experimental paradigm which does not hold true in

other more naturalistic settings.

The major methodological improvement of this study over previous studies is that the Social Relations Model permitted a more complete analysis of interactions between people in a natural setting. Combinations of Type As and Type Bs in previous studies have been incomplete. That is, while Type AA and Type BB dyads are easily constructed, the Type AB dyad does not allow for examination of the possible directional and reciprocal nature of interactions. The inability to separate rater and ratee effects, even in same type dyads, has restricted the questions that could be addressed in previous research on interpersonal perceptions. While the behaviors of Type As and Type Bs have been observed and recorded in laboratory settings, it is not clear how these behaviors were perceived or interpreted by opponents or partners.

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Table 1

The Percentage of Variance Accounted for by Actor and Partner Effects for Each of the Composite Measures

VARIABLE	ACTOR	PARTNER
Type A	0.258**	0.271**
Wiggins A	0.114**	0.355**
Wiggins B	0.168**	0.147**

**p < .01.

Table 2

Correlations Between Scores on the Student JAS and The Individual Estimates of the Actor and Partner Effects on the Three Composite Variables

	TYPE A	WIGGINS A	WIGGINS B
Student JAS Scores with Actor Effects			
Jenkins	0.2942**	0.1625	0.1602
Student JAS Scores with Partner Effects			
Jenks	0.1928	0.1169	-0.0865

**$p < .01$.

able 3

orrelations For Each Inter-Relationship: (a) Reciprocity: Person
's Rating of Person B with Person B's Rating of Person A, (b) Self-
ther Agreement: Person A's Rating of Person B with Person B's
elf-Rating, and (c) Assumed Similarity: Person A's Rating of
erson B with Person A's Self-Rating Across Three Composite
ariables

	INTER-RELATIONSHIP		
VARIABLE	(A) RECIPROCITY	(B) SELF-OTHER AGREEMENT	(C) ASSUMED SIMILARITY
Type A	.10	.40**	.68**
Higgins A	.27	.45**	.59**
Higgins B	.24	.60**	.69**

*p < .01.

Figure 1

Illustration of Blocked, Round Robin Design

		RATEES					
		A1	A2	A3	B1	B2	B3
	A1	—	XX	XX	XX	XX	XX
	A2	XX	—	XX	XX	XX	XX
	A3	XX	XX	—	XX	XX	XX
RATERS							
	B1	XX	XX	XX	—	XX	XX
	B2	XX	XX	XX	XX	—	XX
	B3	XX	XX	XX	XX	XX	—

NOTE: XX represents rating of other.

— represents self-rating.

Subjects A1, A2, and A3 have below median scores on JAS;

Subjects B1, B2, and B3 have above median scores on JAS.